

## REMARKS

The Office Action of November 6, 2009 was received and carefully reviewed. Claims 36-68 were pending prior to the instant amendment. By this amendment, claims 36, 57, and 64 are amended; claim 65 is canceled. Consequently, claims 36-64 and 67-68 are currently pending in the instant application. Reconsideration and withdrawal of the currently pending rejections are requested for the reasons advanced in detail below.

The Examiner's indication of allowable subject matter with respect to claims 43, 45, 50-54, 59-63, 65 and 67 is gratefully acknowledged. However, for the reasons advanced herein, it is respectfully submitted that all of the pending claims 36-64 and 67-68 are allowable.

Claims 57, 58 and 64 were rejected under 35 U.S.C. §102(b) as being anticipated by Kelly (WO 00/58224, hereinafter "Kelly"). Kelly, however, fails to render the claimed invention unpatentable. Each of the claims recite a specific combination of features that distinguishes the invention from the prior art in different ways. At the very least, Kelly fails to disclose or suggest any of these exemplary features recited in independent claims 57 and 64.

For example, independent claim 57 has been amended to recite, *inter alia*, "*flushing for directing cleaning media at said extender element for flushing detritus from the extender element back into the fluid flow within the passage.*" (Basis for the amendment is found, at least, at page 18, lines 12 and 22-24 of the specification as filed.)

Turning to the current Office Action, the Examiner contends that FIG. 1 of Kelly discloses the features of claim 57 by specifically alleging that nozzle 5 of Kelly constitutes the "flushing means" of the present invention. However, upon close review of Kelly, as described at page 9, lines 21-25, nozzle 5 is an untreated water inlet through which sewage

effluent is fed into the reactor chamber. Consequently, the nozzle 5 in Kelly cannot be considered to correspond to the “flushing means” of the claimed invention for at least the following reasons:

- Firstly, the flushing means of the claimed invention directs “cleaning media.” In contrast, nozzle 5 of Kelly delivers untreated sewage to the reactor.
- Secondly, the claimed invention recites that the flushing means directs the cleaning media at said extender element. The nozzle 5 in Kelly does not fulfil the requirement. In the arrangement disclosed by Kelly, an ultra-violet tube 2 is co-axially located within the center of the reaction chamber, and the nozzle 5 directs the sewage at the ultra-violet tube (e.g., see page 6, lines 10-13 of Kelly). Indeed, the acoustic transducer 8 in Kelly is located on the opposing side of the ultra-violet tube 2 (e.g., see FIG. 2). Consequently, the nozzle 5 simply cannot direct fluid at acoustic transducer 8 as the ultra-violet tube 2 is interposed between them.
- Thirdly, the claimed invention requires that the flushing means is able to flush detritus from the extender element back into the fluid flow within the passage. The nozzle 5 in Kelly does not fulfil this requirement, because it, itself, supplies detritus containing sewage to the reaction chamber. Furthermore, nozzle 5 in Kelly provides the only supply of fluid into the reactor. Therefore, it cannot be used to both supply sewage containing detritus and also flush detritus back into the sewage it supplies.

Accordingly, it is submitted that amended claim 57, and all claims dependent thereon, are novel over Kelly. In addition, each of the dependent claims also recites combinations that are separately patentable.

With regard to claim 64, this claim has been amended to include the features of previous dependent claim 65, which was indicated as containing allowable subject matter by the Examiner in the outstanding Office Action. Accordingly, it is submitted that amended claim 64 is novel over Kelly.

For anticipation under 35 U.S.C. § 102, the reference must teach every aspect of the claimed invention either explicitly or impliedly. Any feature not directly taught must be inherently present (M.P.E.P. 706.02). Since each and every element, as set forth in the claims are not found either expressly or inherently described as required by the M.P.E.P., Kelly cannot be said to anticipate the invention as claimed. Hence, withdrawal of the rejection is respectfully requested.

Claims 36-42, 44, 46-49, 55, 66 and 68 were rejected under 35 U.S.C. §103(a) as being unpatentable over Rawson Francis (EP 0 648 531 B1, hereinafter "Rawson"). Each of the claims recite a specific combination of features that distinguishes the invention from the prior art in different ways. For example, independent claim 36 recites a combination that includes, among other things:

*"[f]luid processing apparatus . . . wherein said operating devices are provided at different axial positions along the elongate passage and wherein all axially adjacent operating devices are radially non-parallel and radially non-opposing."*

At the very least, Rawson, whether taken alone or in combination, fail to disclose or suggest any of these exemplary features recited in the independent claims.

Turning to the top of page 4 of the outstanding Office Action, the Examiner contends that FIG. 7 of Rawson shows both parallel and non-parallel and opposing and non-opposing operating devices. As such, the Examiner contends this would still fall within the claimed meaning of the apparatus comprising axially adjacent operating devices which are non-parallel and non-opposing. That is, the Examiner's argument is that Rawson's device comprises these features, provided one ignores alternate operating devices.

However, the Examiner's rationale is traversed, because it simply ignores the actual teaching of Rawson. While the language, for example, of claim 36 may be considered open-ended, and hence, allow for additional features to be included, the features of the claims still represent strict limitations on that claim which cannot be ignored by omission as the Examiner's suggests. Applicant argues that the claim feature "*wherein axially adjacent operating devices are radially non-parallel and radially non-opposing*" can only be construed to mean that **all** adjacent operating devices in the fluid processing apparatus must be radially non-parallel and radially non-opposing. Without adopting such a construction, this claim feature would be meaningless. Indeed, the Examiner's contended construction would render the claim totally unclear, because the claim would then include embodiments in which adjacent operating devices are radially parallel and opposing and, consequently, would not be able to achieve the advantages of the present invention.

As discussed in the previous response, the construction of the claimed invention with axially adjacent operating devices being radially non-parallel and radially non-opposing allows for the applicators of the operating devices to be located in close axial proximity. This has been found to enhance processing performance, while minimising the space required for access passages. An arrangement, in which adjacent operating devices are radially parallel and opposing, as taught by Rawson, cannot achieve these advantages.

In order to clarify the claimed invention and advance prosecution of this application, Applicant's have amended independent claim 36 to recite "*wherein all axially adjacent operating devices are radially non-parallel and radially non-opposing.*" The intention of this amendment is simply to reaffirm that any and all axially adjacent operating devices in the fluid processing apparatus of the present invention are radially non-parallel and radially non-opposing. Rawson does not teach or suggest this feature, because, by the Examiner's own admission, it includes axially adjacent operating devices which are parallel and opposing (e.g. see FIG. 7).

Moreover, Applicant further submits that it would not be obvious to modify Rawson to exclude the parallel and opposing operating devices. Firstly, there is no teaching or suggestion in Rawson, or any other prior art document, that there would be any reason or advantage for doing so. Secondly, as mentioned above, the construction of the present invention allows for the applicators of the operating devices to be located in close axial proximity. In contrast, Rawson teaches a specific construction in which adjacent vibrating members (70) are separated by seals (76) so as to form a fluid channel. Consequently, a skilled person in the art would not look to exclude the parallel and opposing operating devices in Rawson, because this is necessary to form the continuous fluid channel through the vibrating members. Furthermore, one skilled in the art would not, in any event, seek to modify Rawson to locate its vibrating members in closer proximity, because these are separated by the seals. It is therefore submitted that claim 36, and all claims dependent thereon, are novel and non-obvious over Rawson for at least the above reasons.

In accordance with the M.P.E.P. § 2143.03, to establish a *prima facie* case of obviousness of a claimed invention, all the claim limitations must be taught or suggested by the prior art. *In re Royka*, 409 F.2d 981, 180 USPQ 580 (CCPA 1974). "All words in a

claim must be considered in judging the patentability of that claim against the prior art.” In re Wilson, 424 F.2d 1382, 1385, 165 USPQ 196 (CCPA 1970). Therefore, it is respectfully submitted that Rawson, taken alone or in any proper combination, does not disclose or suggest the subject matter as recited in the claims. Hence, withdrawal of the rejection is respectfully requested.

In view of the foregoing remarks, this claimed invention, as amended, is not rendered obvious in view of the prior art references cited against this application. Applicant therefore requests the entry of this response, the Examiner’s reconsideration and reexamination of the application, and the timely allowance of the pending claims.

In discussing the specification, claims, and drawings in this response, it is to be understood that Applicant in no way intends to limit the scope of the claims to any exemplary embodiments described in the specification and/or shown in the drawings. Rather, Applicant is entitled to have the claims interpreted broadly, to the maximum extent permitted by statute, regulation, and applicable case law.

**Except** for issue fees payable under 37 C.F.R. § 1.18, the Commissioner is hereby authorized by this paper to charge any additional fees during the entire pendency of this application including fees due under 37 C.F.R. §§ 1.16 and 1.17 which may be required, including any required extension of time fees, or credit any overpayment to Deposit Account No. 19-2380. This paragraph is intended to be a **CONSTRUCTIVE PETITION FOR EXTENSION OF TIME** in accordance with 37 C.F.R. § 1.136(a)(3).

Should the Examiner believe that a telephone conference would expedite issuance of the application, the Examiner is respectfully invited to telephone the undersigned patent agent at (202) 585-8316.

Respectfully submitted,

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